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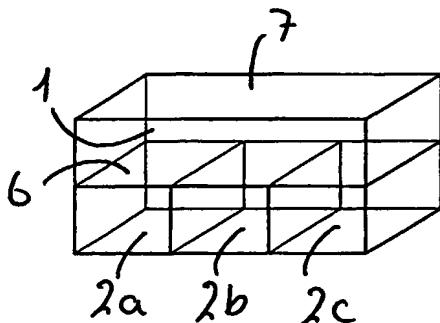
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(54) Title: METHOD AND DEVICE FOR MONITORING ANALYTE CONCENTRATION BY USE OF DIFFERENTIAL OSMOTIC PRESSURE MEASUREMENT



(57) **Abstract:** A method is provided for the determination of the concentration of compounds in body tissue and fluids. The method utilizes two compartments containing reference solutions, which are separated from the sample by two different semi-permeable membranes, in a serial manner, whereby a difference in osmotic pressure occurs in the two compartments due to compounds, which can permeate one of the membranes, but not the other. The difference in osmotic pressure reflects the concentration of these compounds. The method is especially suited for analysis of the concentration of glucose in blood or tissue of diabetic patients, where a device is implanted underneath the skin of the patient and where the method is carried out by using the implanted device.

WO 03/061475 A1